**KENYA NATIONAL DEVELOPMENT PROGRAMME**

Housing and Human Settlements

# NYUMBA YA TAIFA

## *The National Housing Vision*

*A twenty-year programme to secure tenure, upgrade informal settlements, democratise housing finance, and build 200,000 units per year across a rapidly urbanising Kenya.*

Kenya National Development Programme | Housing Directorate | Year One

## Preamble

Kenya is building itself. Every decade, another million people arrive in Nairobi. Mombasa fills its coastline. Kisumu reaches across its lakeshore. Nakuru, Eldoret, Thika, and Kitale absorb arrivals from the land. This is not disorder — it is the fundamental transformation of a nation from predominantly rural to predominantly urban, the same transition that built every industrialised economy in history.

But Kenya's cities have not been designed to receive their inhabitants. The result is a housing deficit estimated at two million units and growing by 200,000 every year, with more than 60 percent of Nairobi's population living in informal settlements that lack security of tenure, adequate sanitation, reliable water, and safe structures. The crisis is not an accident. It is the compound consequence of a century of colonial land law, four decades of inadequate public investment in housing, and a political economy that has consistently privileged land speculation over land use.

Nyumba ya Taifa — the National Housing Vision — is Kenya's answer. It is not a single intervention but a doctrine: an integrated framework for land, finance, tenure,

construction, and governance that treats housing as infrastructure as fundamental as roads, water, or power. This document establishes the full architecture of that framework across a twenty-year horizon.

The vision is ambitious because the problem demands ambition. Kenya will cross fifty percent urbanisation around Year Twelve of this programme. When that inflection point arrives, the housing system must already be functioning at scale. There is no grace period after urbanisation accelerates. The preparation must precede the wave.

**The Core Commitment**

Every Kenyan household has the right to a secure, habitable home on land to which it holds recognised tenure. The state will not achieve this by building all the homes itself — that is beyond any government's capacity and unnecessary. The state's role is to supply the land, establish the finance, secure the tenure, set the standards, build the market infrastructure, and fill the gaps that the market will not fill on its own.

SECTION ONE

# The Housing Doctrine

## 1.1 Three Crises Compounded

Kenya's housing emergency is not a single problem. It is three distinct crises operating simultaneously, each feeding the others, each requiring a different response. A doctrine that addresses only one will fail against the other two.

| Crisis | Primary Symptom | Root Cause |
|---|---|---|
| The Tenure Crisis | Twelve million Kenyans lack legally recognised right to the land on which they live and have lived for decades | Colonial land law, inadequate post-independence formalisation, and the administrative failure of ArdhiSasa to reach informal settlements |
| The Finance Crisis | Mortgage penetration below 3% of the population; commercial banks lend at 14-18% over 15-20 years, placing formal ownership beyond 90% of households | No viable long-term housing finance instrument; employer levy system underdeveloped; cooperative sector fragmented |
| The Supply Crisis | 200,000 unit annual deficit growing against a formal | Land speculation inflating urban land prices; no public |

| Crisis | Primary Symptom | Root Cause |
|---|---|---|
| | construction sector producing fewer than 50,000 units per year | land bank; building materials costs uncompetitive against informal alternatives; skills gap in the construction workforce |

## 1.2 The Sequencing Principle

Every previous Kenyan housing programme has failed to produce durable outcomes because it inverted the correct sequence. It built houses before it secured land, created mortgages before it created income, or upgraded infrastructure before it registered tenure. The result was that improved housing attracted speculation, displaced the original occupants, and reconstituted the informal settlement elsewhere at larger scale.

The Nyumba ya Taifa doctrine establishes an inviolable sequence:

| The Four-Step Sequence — Non-Negotiable |
|---|
| STEP ONE: Land. Establish who is on what land and for how long. Register every household. Map every plot boundary. No other step proceeds without this foundation. |
| STEP TWO: Infrastructure. Install water, sanitation, power, and road access. Infrastructure investment without tenure security rewards the speculator who will displace the registered household the day after the road is paved. |
| STEP THREE: Tenure. Issue the formal certificate — Occupancy Certificate, Community Land Title, Sectional Title, or Leasehold — appropriate to the household's circumstances and the land's character. Tenure without infrastructure is a paper right. Infrastructure without tenure is an eviction warrant. |
| STEP FOUR: Housing Improvement. Support the household to upgrade, extend, or rebuild its structure using the housing finance pathways. Structure improvement without steps one through three is decoration on sand. |

## 1.3 The Landlord Problem

A significant share of informal settlement residents are not squatters in any legal sense. They are tenants paying rent to an informal landlord who themselves may or may not hold recognised tenure. When the state registers tenure in an informal settlement, it must navigate the landlord layer with care — because landlord interests are not the same as tenant interests, and a programme that formalises landlord title without protecting sitting tenants will generate displacement at scale.

The Nyumba ya Taifa doctrine addresses the landlord problem through two mechanisms. First, in-situ upgrading includes a sitting tenant protection clause: a household that has been in continuous occupation of a rental unit for five or more years at the time of community mapping acquires an Occupancy Certificate in its own right, creating a leasehold interest against which the informal landlord's emerging title is subordinate until a negotiated settlement is reached. Second, the Rent Regulation framework (Section Six) establishes the Rent Tribunal as the forum for resolving landlord-tenant disputes arising from formalisation.

This is not a taking. The informal landlord's emerging title is recognised. The programme does not confiscate. But it does not allow tenure formalisation to be used as an instrument of mass eviction either. The sitting tenant who has built their life, raised their children, and created their social network in that settlement has a stake in it that predates any paper that the landlord may subsequently acquire.

## 1.4 The KSBC Market Doctrine

The Kenya State Building Corporation participates in the housing construction market on a specific doctrine that differs fundamentally from conventional state construction monopolies. KSBC does not hold a guaranteed pipeline of housing contracts. It does not receive reserved procurement. It competes.

| KSBC's Three-Part Value in the Housing Market |
|---|
| THE BENCHMARK: When KSBC submits a competitive bid under PPADA rules, every private contractor in that tender knows it must price against KSBC's internally costed proposals. KSBC has no reason to inflate margins, no private shareholders to satisfy, and full transparency of its cost structure to the procuring entity. The mere presence of a credible KSBC bid disciplines the private market's pricing across the entire construction sector — not just in the tenders where KSBC wins. |
| THE MANUFACTURING PLATFORM: KSBC's Housing Production Centres manufacture pre-cast concrete panels, roof structures, foundation blocks, and standardised components at published prices available to any developer, cooperative, or county government. A small contractor building 20 houses in Machakos cannot justify building a pre-cast production line. Buying KSBC components at industrial-scale prices, they can. The HPC is market infrastructure, not market capture. |
| THE GAP FILLER: When the private construction market is at full capacity — during post-disaster reconstruction, during peak urbanisation years, during the ramp-up phase of the programme — KSBC's own construction teams absorb the overflow that private contractors cannot address. KSBC never crowds out the private market when it is functioning. It fills the capacity gap when it is not. |

The Building Standards Institute, housed within KSBC, inspects every building regardless of who built it. A private contractor's structure is inspected by BSI. A KSBC-built structure is inspected by BSI. A county government social housing block is inspected by BSI. The BSI carries no favouritism in its inspection regime. Its standard is the Kenya Building Code, its instrument is technical expertise, and its report is public.

SECTION TWO

# Land for Housing

## 2.1 The Urban Land Problem

Land in Kenyan cities is simultaneously abundant and inaccessible. Abundant, because satellite surveys consistently show that Nairobi, Mombasa, and every major secondary city contain large parcels of undeveloped or underutilised land held by public institutions, state corporations, and private speculators. Inaccessible, because the land registration system, the planning framework, and the financing structures have been designed — whether deliberately or through neglect — to keep serviced urban land out of the hands of low- and middle-income households.

The programme addresses this through four simultaneous instruments: an urban land audit that maps every undeveloped or underutilised public parcel; a railway land compact that releases land along the SGR and KRC corridors specifically for transit-oriented affordable housing; a land value tax that makes holding undeveloped urban land indefinitely expensive; and an Urban Land Bank that acquires, services, and releases land on 99-year ground leases with embedded affordability covenants.

## 2.2 The Urban Land Audit

Within the first twelve months of the programme, every public body holding urban land — national government ministries, parastatals, county governments, universities, the Kenya Railway Corps (as successor to the Kenya Railways Corporation in respect of rail corridor land), the Kenya Ports Authority, the Kenya Airports Authority, the Kenya Power and Lighting Company, the National Cereals and Produce Board, and all others — will submit to the National Land Commission a complete inventory of every urban parcel it holds, its current use, its planning status, and its surface area.

The NLC will publish a consolidated Urban Land Register within eighteen months. Every parcel will be categorised into three classes:

| Class | Definition | Programme Disposition |
|---|---|---|
| Class A — Available | Undeveloped public land with no current operational use and no planned operational use within five years | Transfer to Urban Land Bank within 24 months. Immediate release for housing development under ground lease. |
| Class B — Partially Available | Land with operational use on a portion of the parcel, with a residual area exceeding 0.5 hectares that is undeveloped | Negotiate partial transfer of residual area to Urban Land Bank. Operational portion retained by the holding institution. |
| Class C — Retained | Land with full operational use, land held for planned expansion within five years, or land with heritage designation | Retained by current holder. Subject to periodic review. If planned use does not commence within five years, reclassifies to Class A. |

## 2.3 The Railway Land Compact

The Standard Gauge Railway and the Kenya Railway Corps (as the successor institution holding rail corridor land under the KRC Act) together hold extensive land reserves along their corridors — land that was acquired for infrastructure but whose full width is not required for rail operations. This land sits in some of Kenya's most strategically valuable locations: accessible to major employment nodes, already served by transport infrastructure, and frequently adjacent to existing settlement.

The Kenya Railway Corps, acting under the KRC Act, will enter a formal compact with the Housing Directorate and the Urban Land Bank committing to release corridor land for transit-oriented affordable housing development. The compact terms are as follows:

| Compact Term | Detail |
|---|---|
| Land quantum | A minimum of 15% of KRC's total urban land bank — estimated at 2,400 hectares across Nairobi, Mombasa, Kisumu, Nakuru, and Eldoret — to be transferred to the Urban Land Bank within Year Three |
| Ground lease terms | ULB receives 99-year ground lease at nominal consideration. KRC receives 10% of ground rental income from each parcel for the lease duration as revenue share |
| Planning obligation | All corridor land released for housing must be planned to a minimum density of 150 units per |

| Compact Term | Detail |
|---|---|
| | hectare. Low-density suburban housing is not a permitted use on railway corridor land |
| Affordability covenant | A minimum of 60% of units on any corridor parcel must be designated affordable under the Rent Regulation framework or sold under the housing finance pathways at prices accessible to households earning below Ksh 80,000 per month |
| Transit connectivity | KRC commits to providing scheduled transport service to every corridor settlement within two years of the first occupancy certificate being issued on that corridor land |

## 2.4 Land Value Tax

The most powerful single instrument available to release urban land for housing is a holding cost on undeveloped or underutilised urban parcels. Kenya's current land rates system is based on assessed property values that are infrequently updated, easily disputed, and effectively toothless as a mechanism for discouraging land banking.

The programme introduces a Land Value Tax assessed annually on the unimproved value of all urban land — that is, the value of the land itself exclusive of any buildings or improvements. The LVT replaces the existing rates system for urban land. Its essential characteristic is that it taxes the value of the location, not the productivity of the occupant. The landlord who builds nothing and holds land for capital appreciation pays as much as the landlord who develops it.

| Land Value Tax Schedule — Urban Classified Land |
|---|
| RATE 1 — 1.0% per annum of unimproved land value: All urban land within 5 kilometres of a Central Business District or major employment node |
| RATE 2 — 0.75% per annum of unimproved land value: All urban land within 5–15 kilometres of a CBD or employment node, or land within 2 kilometres of a SGR or BRT corridor |
| RATE 3 — 0.5% per annum of unimproved land value: All other classified urban land |
| EXEMPTIONS: Owner-occupied residential properties below 0.1 hectares; community land registered under the Community Land Act; land actively under construction with valid building permit; agricultural land within urban boundaries under active cultivation |
| VALUATION CYCLE: Annual. National Land Commission maintains the urban |

land valuation register. Appeals heard within 60 days by the Land Valuation Tribunal. Disputed values paid pending appeal.

Revenue from LVT is ring-fenced to the Urban Land Bank at 60% and to county infrastructure funds at 40%. It does not flow to consolidated revenue. The instrument is designed to create both a fiscal pressure that releases land and a funding stream that supports its development.

## 2.5 The Urban Land Bank

The Urban Land Bank is a statutory body established under the Urban Land Bank Act. It acquires, holds, services, and releases urban land exclusively for affordable housing and mixed-income transit-oriented development. It does not sell land freehold. All disposals are on 99-year ground leases with embedded affordability covenants that bind not just the original developer but all subsequent owners for the duration of the lease.

| ULB Mechanism | Description |
|---|---|
| Acquisition mandate | Receives Class A and B public land from the audit; acquires private land through willing-seller negotiation or compulsory acquisition where plots have been vacant for 10+ years with LVT arrears outstanding; acquires railway corridor land through compact |
| Servicing obligation | ULB is responsible for installing trunk infrastructure — access road, water main connection, sewer or septic system, power connection — before releasing any parcel for development. No raw land releases. |
| Ground lease structure | 99-year lease at ground rent of 0.25% of serviced land value per annum. Ground rent reviewed every 10 years. Lessee may sub-lease residential or commercial units but may not sell the land. |
| Affordability covenant | Each parcel's lease specifies the proportion of units that must be let or sold within affordability thresholds. Covenant runs with the land for the full 99 years and is enforceable by ULB against any subsequent holder. |
| Cooperative priority | Housing cooperatives registered under the Cooperative Societies Act receive first refusal on ULB parcels below 2 hectares. SACCO-model cooperative housing schemes are the primary intended beneficiaries of small-parcel ULB releases. |

| ULB Mechanism | Description |
|---|---|
| County obligations | Each county council is required to identify and transfer a minimum of 5% of public land within urban boundaries to the ULB annually. County compliance is reported in the National Housing Dashboard and linked to National Infrastructure Investment transfers. |

SECTION THREE

# Informal Settlement Upgrading

## 3.1 The Mixed Approach

No two informal settlements are alike. Kibera, Mathare, Mukuru, Korogocho, and Kawangware each has its own land history, tenure pattern, physical layout, community organisation, and political context. A single upgrading approach — whether in-situ preservation or comprehensive relocation — applied uniformly across all settlements will fail because it ignores the diversity of conditions it encounters.

The Nyumba ya Taifa doctrine adopts a mixed approach that is household-specific, not settlement-wide. The determining criterion is the length of time a household has been in continuous occupation of its current plot:

| Household Category | Programme Response |
|---|---|
| Long-tenure household: continuous occupation of 10 or more years on the current plot | In-situ upgrading. The household is registered on the plot it occupies. Infrastructure is installed around its structure. Tenure is formalised to Occupancy Certificate → Leasehold Title over the programme's first seven years. The household stays. |
| Medium-tenure household: occupation of 5–9 years on the current plot | In-situ upgrading with structural assessment. Where the structure is safe and the plot is not in a hazard zone (flood plain, road reserve, power line easement, waterway buffer), the household is registered in place. Where structural risk or hazard zone location make in-situ upgrading impossible, voluntary relocation with full compensation is offered. |
| Recent-arrival household: occupation of fewer than 5 years on the current plot | Voluntary relocation. The household is offered a real alternative — a ULB ground lease parcel or a place in a social housing block — at rental terms equivalent to or better than their current arrangements. |

| Household Category | Programme Response |
|---|---|
| | Compensation is paid at a rate assessed against three months of rental savings. No household is relocated without a confirmed alternative. |
| Tenant household in any of the above | Assessed separately from landlord's tenure category. A tenant in continuous occupation of 5 or more years acquires an Occupancy Certificate in their own right on the unit they occupy, regardless of the landlord's tenure status. Landlord compensation is assessed against the unit's market rental value, not its freehold value. |

## 3.2 The Four-Step Sequence in Practice

The four-step sequence — mapping, infrastructure, tenure, housing improvement — is not a bureaucratic checklist. It is the operational backbone of every upgrading programme. Each step has defined deliverables, responsible parties, community participation mechanisms, and quality standards.

| Step | Deliverable | Responsible Party |
|---|---|---|
| STEP ONE: Community Mapping and Plot Registration | Complete plot-level map of the settlement including structure footprints, plot boundaries, household data, tenure claims, and utility access points. Every household receives a plot registration card with a unique identifier linked to the national ArdhiSasa system. | National Land Commission (NLC) with community mapping teams drawn from the settlement itself, trained and paid as community mapping officers |
| STEP TWO: Infrastructure Installation | Water main and household connections; pit-latrine replacement with connected sanitation or shared sanitation blocks where lot size prohibits individual connections; community electricity connections; road network (graded murram minimum, tarmac on arterials); solid waste collection points. | KRCC for civil works on roads and drainage; Kenya Water Towers Agency for water mains; county utilities for electricity connections. Private contractors under PPADA for all works above Ksh 5 million. |
| STEP THREE: Tenure Formalisation | Occupancy Certificate issued within 6 months of plot registration confirmation. Leasehold Title issued within 3 | NLC with ArdhiSasa as the digital registry. NLC targets a processing time of 30 days for OC issuance from complete |

| Step | Deliverable | Responsible Party |
|---|---|---|
| | years for long-tenure households. Sectional Titles issued for multi-storey social housing blocks. Community Land Trust registrations for common areas. | application. |
| STEP FOUR: Housing Improvement | Household accesses one of the three housing finance pathways to upgrade, extend, or rebuild its structure to Kenya Building Code standard. Building Standards Institute provides technical advisory to any household on request, free of charge, during the first five years of the programme. | National Housing Bank administers loans. SACCO cooperative levy programme. Rent-to-own operators licensed by the Housing Regulatory Authority. |

## 3.3 Priority Settlement Programme — Year One to Year Five

Five settlements are designated as the Priority Settlement Programme for the first phase of the national upgrading effort. They are selected because they collectively house more than one million Nairobi residents, they sit on land where tenure disputes are most acute, and they represent the full range of settlement types and challenges that the programme will face at scale across the country.

| Settlement | Phase | Programme Priority |
|---|---|---|
| Kibera — Phases 1–3 (Soweto East, Laini Saba, Lindi) | Phase 1: Years 1–5. Phase 2: Years 4–8. Phase 3: Years 7–12. | Largest informal settlement in sub-Saharan Africa by population density. Primary challenge is Mombasa Road frontage speculation and the complex of government land holdings (KR, Ministry of Defence, Langata Forest). Tenure formalisation requires NLC mediation with multiple national government landowners. |
| Mathare — Phases 1–2 (Mabatini, Kosovo, 3A) | Phase 1: Years 1–5. Phase 2: Years 4–8. | Mathare River flood-plain presents the programme's most severe hazard-zone relocation challenge. Estimated 30% of current structures are within the 50-year flood plain and require relocation. Phase 1 concentrates on ridge and slope areas above flood risk. River bank remediation and relocation are Phase 2 priorities. |

| Settlement | Phase | Programme Priority |
|---|---|---|
| Mukuru — Phase 1 (Mukuru kwa Njenga, Mukuru kwa Reuben) | Phase 1: Years 1–6. | Industrial corridor tenure complexity — significant portions of Mukuru sit within industrial zoning. Programme pursues re-zoning of residential-use portions through the Nairobi Metropolitan Area Regional Plan. In-situ upgrading proceeds in areas already zoned residential. |
| Korogocho — Phase 2 | Phase 2: Years 3–7. | Smaller settlement than Kibera or Mathare with relatively higher average household incomes and a more active informal economy. Programme here emphasises small-business formalisation and commercial corridor development alongside residential upgrading. |
| Kawangware — Phase 2 | Phase 2: Years 3–7. | Significant existing landlord-tenant structure. Programme addresses the landlord problem directly here as a model for subsequent settlements. Sitting tenant protection certificates are issued before any landlord tenure formalisation proceeds. |

All five Priority Settlement programmes are implemented through dedicated Settlement Upgrading Units — multidisciplinary teams of engineers, community development officers, legal officers, and finance advisors — seconded to the Office of the Nairobi Metropolitan Area Commissioner and reporting to the Housing Directorate.

The policy of the programme is absolute: no forced eviction, no bulldozers. A community mapping officer who participates in any forced eviction or demolition without a court order and without a confirmed alternative for the affected household is dismissed, prosecuted, and permanently barred from public service. This is not a preference. It is a condition of employment.

SECTION FOUR

# Tenure Security Framework

## 4.1 The Tenure Spectrum

Not all households require the same tenure instrument. A rural household on ancestral land held under customary arrangements has different tenure needs from a Nairobi apartment owner, a Kibera resident who has lived in the same structure for

twenty-five years, or a household in a new social housing block. The Nyumba ya Taifa tenure framework is a spectrum of instruments, each appropriate to a different set of circumstances, each offering progressively stronger security and financiability as households move up the spectrum over time.

| Tenure Instrument | Description and Application |
|---|---|
| Community Land Register (CLR) | The foundational entry point. Applicable to rural land held under customary tenure and to peri-urban land held by identifiable communities. Registration under the Community Land Act gives the community — not individual households — formal recognition of their collective land rights. Protects against alienation without community consent. Individual plots within CLR land may be progressively individualised at community request. |
| Occupancy Certificate (OC) | The primary instrument for informal settlement upgrading. Issued to individual households on the basis of plot registration and confirmed continuous occupation. Confers the right to remain, the right to sublet, and the right to use the certificate as collateral for housing improvement loans under the National Housing Bank's OC-secured product. Issued within 30 days of complete application. No survey required — sketch plan from community mapping is sufficient. |
| Leasehold Title — 50 Year | Upgrades from OC for households that have held an OC for three or more years and whose plot has been formally surveyed. Issued by NLC. Registerable under the Land Registration Act. Full collateral value. Can be converted to 99-year leasehold or freehold by county resolution on mapped urban land. |
| Leasehold Title — 99 Year (Ground Lease) | Standard title for ULB parcels and for households on public land. Non-transferable as land but the building improvements are fully transferable. Ground rent payable at 0.25% of assessed land value per annum. The affordability covenant runs with the 99-year leasehold and binds all transferees. |
| Sectional Title | Applicable to multi-storey social housing and apartment blocks. Each unit within the block is registered as a distinct sectional title. The common areas — lifts, corridors, grounds, roof — are held in common by all sectional title holders through a Body Corporate. Sectional titles are mortgageable and transferable. |
| Community Land Trust (CLT) | Hybrid instrument for settlements where the community chooses collective ownership of the land |

| Tenure Instrument | Description and Application |
|---|---|
| | with individual occupancy rights for member households. The trust holds the land in perpetuity. Individual members hold 99-year heritable leases from the trust. The trust's board is elected by member households. CLT land cannot be alienated without a 75% member vote and NLC approval — a structural protection against gentrification. |

## 4.2 ArdhiSasa Integration

The ArdhiSasa digital land registry platform, developed by the Ministry of Lands, is the operational backbone of the tenure framework. All tenure instruments issued under this programme are registered on ArdhiSasa. Community mapping data is uploaded to ArdhiSasa in real time. Occupancy Certificate applications are submitted through ArdhiSasa. Title searches are conducted through ArdhiSasa. Encumbrance registration — mortgages, charges, cautions — is processed through ArdhiSasa.

The programme funds a major expansion of ArdhiSasa's capacity and connectivity specifically to support the settlement upgrading programme:

| ArdhiSasa Expansion Component | Specification |
|---|---|
| Offline mapping capability | ArdhiSasa field application functions without internet connectivity for up to 72 hours, syncing when connectivity is restored. Essential for settlements with poor network coverage. |
| Community mapping officer interface | Simplified field interface for non-technical community mapping officers. Point-and-click plot boundary delineation using phone GPS. Photograph capture linked to household record. |
| OC processing pipeline | Dedicated processing queue for Occupancy Certificate applications from Priority Settlements. Target: 30-day issuance from complete application. Automated status notifications to applicant household. |
| Housing finance linkage | Direct API connection between ArdhiSasa tenure record and National Housing Bank loan application system. OC holders can apply for NHB housing improvement loans without re-submitting tenure documents. |
| Public transparency | All registered titles — CLR, OC, Leasehold, Sectional, |

| ArdhiSasa Expansion Component | Specification |
|---|---|
| portal | CLT — visible on public ArdhiSasa portal with parcel boundaries and encumbrance status. No private data visible. Ensures that households can verify their own registration status and that no fraudulent double-registration goes undetected. |

SECTION FIVE

# Housing Finance

## 5.1 The Finance Problem

Mortgage penetration in Kenya stands below three percent of the population. The median Kenyan household cannot access a commercial mortgage not because it lacks the will to own its home, but because commercial mortgage products are designed for the upper quartile of formal sector earners. An interest rate of 14 to 18 percent over 15 to 20 years, combined with collateral requirements that exclude Occupancy Certificates and other informal-tenure instruments, makes formal home ownership mathematically impossible for the majority of the population.

The programme introduces three housing finance pathways operating simultaneously. No household is directed exclusively to one pathway. Each household assesses its own circumstances and chooses the pathway that fits. The three pathways are not competitive with each other — a household may use different pathways at different stages of its housing journey.

## 5.2 Pathway One — Rent-to-Own

The rent-to-own pathway is designed for households that currently rent in the informal market and whose income is sufficient to sustain a monthly payment of 25 to 30 percent of household income, but insufficient to support a conventional mortgage deposit and approval process.

| Rent-to-Own Structure |
|---|
| OPERATOR: Licensed private rent-to-own operators, registered under the Housing Regulatory Authority. Operators raise capital through bond markets, development finance institutions, and impact investment. They are not banks but property companies operating under a regulated framework. |

| |
|---|
| ASSET: Operator acquires or develops a housing unit on a ULB ground lease parcel. Unit is built to Kenya Building Code standard and inspected by BSI. |
| PAYMENT STRUCTURE: Household pays a monthly occupancy fee equal to 25-30% of verified household income. Fee is fixed in real terms (CPI-indexed) for the first five years, then reviewed at five-year intervals. No lump-sum deposit required — a refundable security deposit of two months' payment is the only upfront cost. |
| OWNERSHIP TRANSITION: After 20 years of continuous payment, the household acquires a Sectional Title or 99-year Leasehold Title to the unit at no additional cost. The operator retains no residual interest. |
| EARLY PURCHASE OPTION: At any point after Year Five, the household may exercise an early purchase option, paying the outstanding book value of the operator's investment in the unit at a rate discounted by the proportion of payments already made. |
| INCOME VERIFICATION: Housing Regulatory Authority sets minimum and maximum income bands for rent-to-own eligibility. The pathway is reserved for households earning between Ksh 15,000 and Ksh 120,000 per month. Above Ksh 120,000, households are directed to the subsidised mortgage pathway. |

## 5.3 Pathway Two — Cooperative SACCO Housing Levy

The cooperative movement in Kenya is the most extensive financial network reaching low-income households. Kenya's SACCOs collectively hold assets exceeding Ksh 800 billion and serve more than five million members. The cooperative housing levy pathway harnesses this existing infrastructure for housing finance without building a parallel system.

| Levy Component | Structure |
|---|---|
| Member contribution | 2% of gross monthly earnings deducted at source by employer and remitted to the member's SACCO housing levy account. Self-employed members remit directly. Levy accumulates in a ring-fenced housing sub-account within the member's SACCO |
| SACCO match | SACCO matches member levy at 1% from its own general reserves, credited to the member's housing levy account. SACCO match is a mandatory requirement for participation in the national programme — SACCOs that cannot sustain the match are assisted by the National Housing Bank to restructure |
| Levy accumulation period | Minimum 36 months of continuous levy contribution before the member may draw down for housing |

| Levy Component | Structure |
|---|---|
| | purposes. Early withdrawal for housing emergency is permitted with Housing Directorate approval |
| Eligible uses | Draw-down may be used for: deposit on rent-to-own scheme; purchase of ULB ground lease parcel; building materials and labour for housing improvement on OC or leasehold-titled land; purchase of equity in a cooperative housing scheme |
| National pooling | SACCOs with fewer than 500 housing levy members pool their housing levy accounts through the Kenya National SACCO Federation into a national pooled investment fund managed by the National Housing Bank. Pooling gives small SACCOs access to the same development finance terms as large ones |

## 5.4 Pathway Three — National Housing Bank Subsidised Mortgage

The National Housing Bank is established under the National Housing Bank Act as a state-owned development finance institution with a specific mandate: to provide long-term mortgage finance to Kenyan households at interest rates and on terms that the commercial banking sector will not offer at scale. The NHB does not compete across the full mortgage market. It targets households below the commercial mortgage accessibility threshold.

| National Housing Bank — Core Mortgage Product |
|---|
| INTEREST RATE: 7% fixed per annum for the full loan term. Rate is fixed, not variable. The household knows at the time of signing what its final payment will be in Year 30 in nominal terms. |
| LOAN TERM: 30 years maximum. Shorter terms are permitted at borrower preference. |
| LOAN AMOUNT: Minimum Ksh 500,000. Maximum Ksh 8,000,000 for the subsidised product. Above Ksh 8 million, commercial mortgage market applies. |
| COLLATERAL: The NHB accepts Occupancy Certificates, 50-year and 99-year Leasehold Titles, and Sectional Titles as collateral. This is the critical departure from the commercial market, which accepts only freehold title. |
| EMPLOYER LEVY FUNDING: The NHB is funded through a 1.5% employer levy on all formal sector payrolls, matched by a 1.5% employee contribution. Self-employed individuals contribute 3% of declared income. The levy is mandatory for all employers with 5 or more employees. Accumulated levy is the primary capital source for the NHB's mortgage book. |

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|---|
| INCOME BAND: Households earning between Ksh 30,000 and Ksh 250,000 per month are eligible for the subsidised NHB mortgage. Below Ksh 30,000, the household is directed to the rent-to-own or SACCO levy pathways. Above Ksh 250,000, commercial mortgages are expected to be accessible. |
| DEFAULT MANAGEMENT: NHB does not foreclose within the first 24 months of default without offering a restructuring arrangement. A household that loses employment and demonstrates genuine hardship may convert to an income-contingent repayment plan for up to 36 months. |

The NHB is capitalised in its first year through a Ksh 50 billion government equity injection, supplemented by a World Bank/AfDB/EIB joint development finance facility. The employer levy is projected to generate Ksh 35 billion per annum at full implementation, providing the NHB with a growing and sustainable domestic capital base that reduces dependence on international borrowing over time.

SECTION SIX

# Rent Regulation

## 6.1 The Regulation Doctrine

Rent regulation in Kenya has historically oscillated between two failure modes: unenforceable price controls that landlords simply ignore, and complete deregulation that leaves tenants — particularly in informal settlements — exposed to arbitrary rent increases and eviction without recourse. The Nyumba ya Taifa rent regulation framework takes a different approach: it regulates quality rather than price as its primary mechanism, and uses the quality standard as the condition that activates the price ceiling.

| The Habitability Standard as the Condition of Regulated Rent |
|---|
| A landlord who rents a unit that meets the Kenya Building Code Habitability Standard — structurally sound walls and roof; adequate natural light and ventilation; a connected sanitation facility; a clean water connection or access to communal water within 50 metres; a safe electrical installation — is entitled to charge up to the Regulated Rent Schedule ceiling for that unit's category. |
| A landlord who rents a unit that does not meet the Habitability Standard is not entitled to enforce rent at any level through the courts. The tenant of a substandard unit may pay a reduced habitable-rate until the unit is brought to standard, and the landlord has no legal mechanism to recover arrears accrued during the period of non-compliance. |

This is not a rent freeze. It is a quality threshold that determines whether the landlord is entitled to the protection of the law in enforcing their lease.

## 6.2 The Rent Schedule

The Regulated Rent Schedule sets the ceiling — not the floor — for rents in each unit category. Landlords may charge below the ceiling. Market competition will, in most cases, operate below the ceiling for units that meet the standard. The ceiling becomes operative only where market power is distorted — where supply shortage or urban land scarcity allows landlords to extract rents that are materially above what the market would produce under normal competition.

| Unit Category | Habitability Standard Requirement | Regulated Rent Ceiling (Nairobi — reviewed annually) |
|---|---|---|
| Category 1: Single room, less than 15 sq m | Shared sanitation within 30m acceptable. Shared water within 30m acceptable. | Ksh 4,500 per month |
| Category 2: Single room, 15–25 sq m, or bedsitter with cooking area | Shared sanitation within 20m acceptable. Own water connection required or shared within 15m. | Ksh 7,000 per month |
| Category 3: One-bedroom unit, 30–55 sq m | Own sanitation required. Own water connection required. | Ksh 14,000 per month |
| Category 4: Two-bedroom unit, 55–85 sq m | Own sanitation. Own water. Safe electrical installation. | Ksh 22,000 per month |
| Category 5: Three-bedroom and above | Full Kenya Building Code compliance. Own sanitation and water. Full electrical installation. | Ksh 35,000 per month base, plus Ksh 4,000 per bedroom above three |

The schedule above applies to Nairobi. County-specific schedules are published annually by the Housing Regulatory Authority, calibrated to local market conditions in Mombasa, Kisumu, Nakuru, Eldoret, and twenty-three secondary towns. Rent increases within the regulated band are capped at CPI plus 2% per annum and require 90 days written notice.

## 6.3 The Rent Tribunal

The Rent Tribunal replaces the Rent Restriction Tribunal established under the Rent Restriction Act, which has been chronically under-resourced and largely dysfunctional for two decades. The new Rent Tribunal is constituted as an administrative tribunal with a mandate, a budget, and a timeline:

| Tribunal Feature | Specification |
|---|---|
| Composition | Three-member panels: a lawyer (chair), a quantity surveyor or building inspector, and a tenant-community representative selected from a panel of trained community arbitrators. Each major city has at least one permanent panel; secondary towns are served by circuit panels. |
| Jurisdiction | All disputes between landlords and tenants in residential accommodation. Rent quantum disputes; habitability standard disputes; illegal eviction claims; unlawful rent increase claims; landlord-tenant disputes arising from settlement upgrading and tenure formalisation. |
| Resolution timeline | 30-day resolution target from date of application. Urgent matters — illegal eviction, immediate safety risk — heard within 5 working days. The 30-day target is a performance obligation of each panel; persistent non-compliance triggers a review of the panel's composition. |
| Remedies | Rent reduction orders; compensation awards; habitability compliance orders with penalty for non-compliance; eviction suspension orders; rent repayment orders for amounts collected in excess of regulated ceiling. |
| Enforcement | Rent Tribunal orders are enforceable by Subordinate Court warrant without further hearing. A landlord who fails to comply with a Tribunal order within 30 days faces a fine of up to Ksh 500,000 and the revocation of any rental income tax concessions. |
| Access | Tribunal applications are free of charge. Forms are available in Swahili and English. Telephone application accepted for urgent matters. Representation by legal counsel is permitted but not required — the Tribunal process is designed to be navigable without a lawyer. |

SECTION SEVEN

# The Construction Market

## 7.1 Market Architecture

The housing construction market in Kenya is currently characterised by a small number of large formal contractors operating in the upper segment; a large number of informal contractors — fundis and their informal teams — operating in the middle and lower segments; and virtually no pre-fabricated or pre-cast manufacturing sector of any scale. The result is that the formal market cannot reach most of the population, and the informal market cannot achieve the quality standards, the cost efficiency, or the speed of delivery that 200,000 units per year requires.

The programme does not simply commission more houses. It restructures the construction market by:

- Establishing KSBC's Housing Production Centres as national manufacturing infrastructure that any developer can access
- Creating a tiered contractor registration system that brings qualified fundis into the formal market with proper insurance, warranty obligations, and building permit accountability
- Using KSBC's competitive bids as the price signal that disciplines private contractor pricing across the sector
- Expanding the Building Standards Institute's inspection capacity to reach every permitted structure, not just those built by registered contractors

## 7.2 Housing Production Centres

KSBC's Housing Production Centres are industrial facilities that manufacture pre-cast and pre-fabricated housing components to Kenya Building Code standard. There are seven HPCs in the national programme:

| HPC Location | Primary Market | Initial Annual Capacity |
|---|---|---|
| Nairobi (Athi River) | Nairobi Metropolitan Area | 400,000 panels; 80,000 roof units |
| Mombasa (Miritini) | Coast Region, Mombasa Port corridor | 200,000 panels; 40,000 roof units |
| Kisumu | Lake Region, Western Kenya | 150,000 panels; 30,000 roof units |
| Nakuru | Rift Valley Region | 150,000 panels; 30,000 roof units |

| HPC Location | Primary Market | Initial Annual Capacity |
|---|---|---|
| Eldoret | North Rift Region | 100,000 panels; 20,000 roof units |
| Meru | Mount Kenya Region, Eastern Kenya | 100,000 panels; 20,000 roof units |
| Garissa | North Eastern Region, ASAL counties | 80,000 panels; 16,000 roof units |

HPC products are published in a national catalogue at transparent ex-works prices. Published prices do not vary by buyer category — a county government, a private developer, a SACCO housing cooperative, and an individual self-builder pay the same price for the same component. Bulk orders above 500 units receive a 5% quantity discount. All HPC components carry a ten-year structural warranty backed by KSBC.

HPC facilities are established in phases: Nairobi, Mombasa, and Kisumu in Year One; Nakuru and Eldoret in Year Two; Meru and Garissa in Year Three. KSBC submits competitive bids to construct each HPC under PPADA rules and may win those contracts — but the procuring entity (the Housing Directorate) is required to seek at least three competitive bids, and the lowest compliant bid wins regardless of whether it is KSBC or a private contractor.

## 7.3 Contractor Registration and the Fundi Tier

Kenya's informal construction workforce — the fundis — represents the single largest latent asset in the housing supply chain. Fundis build the vast majority of Kenya's housing stock. They are skilled, adaptable, and deeply embedded in local markets. Their limitation is not capability: it is the absence of a formal framework that gives them insurance, access to credit for equipment, liability protection, and the building permit accountability that the formal market requires.

The programme introduces a three-tier contractor registration system managed by the Housing Regulatory Authority in partnership with the National Construction Authority:

| Tier | Description | Requirements and Benefits |
|---|---|---|
| Tier 3 — Registered Fundi | Individual artisan or small team of up to 5 workers. Works on single residential structures below Ksh 2 | REQUIREMENTS: KNQF Level 4 Building Skills Certificate or equivalent demonstrated competency; personal liability insurance (subsidised first year by HRA); building permit application |

| Tier | Description | Requirements and Benefits |
|---|---|---|
| | million in contract value. | ability for Tier 3 projects. BENEFITS: Access to NCA Tier 3 tender register; HPC component purchase at individual price; NHB small contractor credit line at 9% for materials. |
| Tier 2 — Small Contractor | Firm of 6–50 workers. Works on projects up to Ksh 15 million. | REQUIREMENTS: NCA registration; KNQF Level 5 or 6 qualified site supervisor on every project; professional indemnity and site liability insurance; approved safety plan; tax compliance certificate. BENEFITS: Access to county government tender register; HPC bulk pricing; NHB contractor bridging finance. |
| Tier 1 — Main Contractor | Firm with 50+ workers or capacity above Ksh 15 million. Eligible for all public tenders. | REQUIREMENTS: Full NCA registration; registered engineer or architect on staff; full insurance suite; audited accounts for three years; PPADA compliance record. BENEFITS: National tender register; eligible to bid against KSBC on all Housing Directorate contracts. |

The KNQF Building Skills Certificate is administered by the Kenya National Qualifications Authority in partnership with TVET institutions, with practical assessment delivered at construction sites. The certificate is the entry credential for Tier 3 registration. County governments are required to run at least two KNQF Level 4 Building Skills cohorts per county per year, with priority places reserved for informal settlement residents.

## 7.4 The Building Standards Institute

The Building Standards Institute, operating within KSBC as an operationally independent unit, is the universal inspection authority for all new construction in Kenya. Universal means universal. A structure built by KSBC, a Tier 1 contractor, a Tier 3 fundi, or a self-builder — if it has a building permit, it is inspected by BSI. If it does not have a building permit, BSI has the authority to issue a stop-work notice and refer to the relevant county enforcement authority.

BSI inspection is staged through construction:

- Foundation inspection — before pouring concrete
- Structural frame inspection — at slab or wall plate level
- Roofing and weatherproofing inspection — before interior fit-out

- Completion inspection — before occupancy certificate of completion is issued

BSI inspectors are salaried civil servants within KSBC. They do not accept fees from the structures they inspect. The inspection fee is paid to KSBC centrally as part of the building permit fee schedule. A BSI inspector who accepts a cash payment from a contractor or property owner is dismissed and prosecuted. Inspection records are public on the ArdhiSasa portal within 7 days of each inspection.

SECTION EIGHT

# Rural Housing Quality

## 8.1 The Rural Housing Challenge

Rural housing in Kenya suffers from a different set of constraints than urban housing. The challenge is not primarily one of land — rural families typically have access to land — or of density. The challenge is quality. A significant proportion of Kenya's rural housing stock is structurally inadequate: earthen walls that erode in heavy rain; unventilated interiors that concentrate cookfire smoke; leaking iron-sheet roofs that corrode within a decade; pit latrines positioned to contaminate shallow wells.

The programme does not attempt to provide rural housing directly. Rural housing is best built and maintained by the household itself, with access to quality materials, technical guidance, and affordable finance. The programme's role in the rural context is to create the enabling conditions: materials access through cooperatives, building skills certification through TVET, finance through the African Development Bank of Kenya's rural improvement loan product, and a permanent rural home standard that defines what the programme is trying to achieve.

## 8.2 Rural Materials Cooperative

The Rural Materials Cooperative is a national network of county-level cooperative societies that purchase building materials in bulk — cement, roofing iron, structural timber, windows, sanitation hardware — and sell them to rural households at cooperative prices. The cooperative is not a government store. It is a farmer-owned buying cooperative on the model already used successfully for agricultural inputs, adapted for building materials.

| Cooperative Component | Description |
|---|---|
| Membership | Any rural household intending to build or improve a permanent home may join the county cooperative society at a one-time membership fee of Ksh 500. Membership is for life and transfers to inheriting household members. |
| Bulk purchasing | County cooperatives pool orders monthly and negotiate with national suppliers (Bamburi Cement, Mabati Rolling Mills, Timsales, and other major manufacturers) for volume discount pricing. Cooperative prices are typically 15–25% below retail. |
| Transport network | KRCC's rural road construction programme includes a rural materials delivery obligation: KRCC delivers cooperative material orders to any location on a classified rural road on a cost-recovery transport tariff. This eliminates the 'last mile' transport premium that currently inflates rural building materials costs by 30–60%. |
| Credit integration | Cooperative members who are also ADBK rural improvement loan borrowers may draw materials directly from the cooperative against their loan facility, with cooperative invoices submitted to ADBK for loan disbursement. No cash handling between borrower and materials store. |
| KSBC HPC linkage | The Rural Materials Cooperative has a standing order arrangement with the Nakuru, Eldoret, and Kisumu HPCs for pre-cast roof trusses, concrete lintels, and foundation blocks. Rural self-builders can order HPC components through the cooperative network with cooperative pricing and KRCC delivery. |

## 8.3 The KNQF Building Skills Certificate — Rural Programme

The Kenya National Qualifications Framework Level 4 Building Skills Certificate, described in Section Seven in its urban context, has a specific rural programme track. The rural track is delivered at county TVET colleges, with practical assessment conducted at real building sites — typically households that are constructing or improving their home as part of the ADBK loan programme and have consented to their site being used for training purposes.

The rural KNQF programme trains a household member — not just external contractors — to reach Level 4 competency in the specific skills relevant to rural construction: stone or block wall laying; roof truss assembly and iron-sheet fixing;

simple foundation design; pit latrine and septic tank construction; rainwater harvesting tank installation. A household member with a Level 4 certificate can supervise and participate in the construction of their own home to a quality standard that meets the permanent rural home definition.

## 8.4 ADBK Rural Housing Improvement Loan

The African Development Bank of Kenya's rural improvement loan product is the housing finance pathway for rural households. It is distinct from the NHB's urban mortgage product in its structure, its collateral requirements, and its repayment mechanism.

| ADBK Loan Feature | Specification |
|---|---|
| Loan amount | Ksh 100,000 to Ksh 1,200,000 |
| Interest rate | 8% fixed per annum, subsidised by the Housing Directorate rural housing grant of 2% per annum (effective rate to borrower: 8%; state absorbs 2%) |
| Loan term | 5 to 15 years, depending on loan amount and borrower income assessment |
| Collateral | Land title, CLR certificate, or a formal letter of recognition from the sub-county administrator confirming undisputed occupation. ADBK does not require a formal survey for loans below Ksh 500,000. |
| Repayment | Monthly repayments. Where the borrower is primarily an agricultural producer, a seasonal repayment option is available: lower monthly payments during non-harvest months, higher payments after harvest. |
| Eligible improvements | Permanent wall construction (stone, block, or brick replacing earth); iron-sheet or tiled roof installation; pit latrine or septic tank construction; rainwater harvesting tank; solar energy installation; kitchen ventilation improvement. Not eligible: land purchase; non-residential construction. |
| Technical advisory | All ADBK rural improvement loans include two free visits from a county building advisor — a KNQF Level 5 or 6 qualified officer based at the sub-county — to advise on construction quality during the build. |

## 8.5 The Permanent Rural Home Standard

The permanent rural home standard is the definition that the programme uses to measure progress in rural housing quality. It is not a luxury benchmark. It is the minimum that a Kenyan household deserves.

| Permanent Rural Home Standard — Kenya |
|---|
| STRUCTURE: Permanent walls of stone, concrete block, or fired brick. Mortar-jointed. Minimum wall thickness 150mm. Roof of corrugated iron sheet on timber or steel truss, or fired clay tile. |
| FLOOR: Concrete screed floor, minimum 75mm thickness, or alternative impermeable and cleanable surface. Earth floors do not meet the standard. |
| VENTILATION: Minimum two openable windows per habitable room. Kitchen with at least one flue or external ventilation outlet. Cookfire smoke must not accumulate in the habitable interior. |
| WATER: Rainwater harvesting tank of minimum 5,000 litres capacity connected to roof catchment, or connection to piped water supply within 100 metres, or clean borehole within 200 metres. |
| SANITATION: Enclosed, fly-proof pit latrine minimum 10 metres from water source and 15 metres from the main dwelling, or septic system connected to internal sanitation. |
| ELECTRICAL: Either grid connection or solar installation providing minimum 50W of usable power for lighting and mobile device charging. Not a requirement where grid connection is more than 5km and no solar programme operates in the area. |
| ASSESSMENT: Sub-county building advisor certifies compliance. A home that meets the standard is eligible for the rural housing quality certificate, which is linked to the ArdhiSasa national housing database. |

SECTION NINE

# County Housing Obligations

## 9.1 The County Role

Housing is a concurrent function under the Constitution of Kenya. Counties plan and regulate land use, enforce building codes, manage urban planning, and provide local infrastructure. The Nyumba ya Taifa programme does not centralise housing away from counties — it establishes clear obligations that counties must meet as the

condition for accessing national housing infrastructure investment, and it builds the county-level capacity to meet those obligations.

## 9.2 The Annual County Housing Plan

Every county government submits an Annual County Housing Plan to the Housing Directorate by 1 September of each year, covering the following twelve-month period. The plan is a public document, published on the county government's website and submitted to the County Assembly for approval. Counties that do not submit a compliant plan by 1 November are classified as non-compliant and their National Infrastructure Investment transfer for housing is withheld until compliance is restored.

| Plan Component | Required Content |
|---|---|
| Housing needs assessment | Current stock, estimated deficit, and breakdown by category (social housing, affordable private, market rate). Updated annually using county population data and construction permit records. |
| Affordable housing target | Stated number of new affordable units to be added within the county in the coming year, by category and location. |
| Public land release | Identification and transfer schedule for a minimum of 5% of county-owned urban land to the Urban Land Bank in the coming year. Specific parcels identified by ArdhiSasa plot number. |
| Settlement upgrading progress | Status update on any informal settlement upgrading programme within the county, using the four-step sequence. Number of households mapped, infrastructure installed, tenure instruments issued, and housing improvements begun. |
| Contractor registration support | Number of KNQF Level 4 Building Skills cohorts planned; number of Tier 3 Registered Fundi registrations supported; county contribution to NCA Tier 2 contractor development. |
| Rental market compliance | Number of Rent Tribunal cases resolved; number of habitability inspections conducted; number of compliance orders issued and complied with. |

## 9.3 The National Housing Dashboard

The Housing Directorate maintains a public National Housing Dashboard, updated quarterly, that displays progress against all county housing obligations and national programme targets. The dashboard is the primary accountability mechanism for the programme.

| Dashboard Metric | Measurement |
|---|---|
| Annual units completed | New residential units receiving BSI completion inspection and ArdhiSasa registration, by county |
| Tenure instruments issued | Occupancy Certificates, Leasehold Titles, Sectional Titles, CLT registrations, by county and by settlement |
| Informal settlement upgrading progress | Proportion of households in Priority Settlements completing each of the four steps, updated quarterly |
| Public land released to ULB | Hectares released annually by each county against the 5% obligation |
| NHB mortgage disbursement | Number and value of NHB mortgages by county, income band, and collateral type |
| Rent Tribunal performance | Average days to resolution; number of cases by category; compliance rate with Tribunal orders |
| KSBC bid competitiveness | KSBC tender win rate; KSBC bid price versus winning private bid price where KSBC does not win; HPC component sales by county |
| Rural housing quality certificates | Number of homes meeting the Permanent Rural Home Standard, by county |

The dashboard data is not advisory. It is the basis for the annual county performance assessment conducted by the Housing Directorate. Counties in the top quartile of performance receive a 10% uplift on their National Infrastructure Investment housing component. Counties in the bottom quartile receive a performance improvement notice and are required to submit a remediation plan within 60 days.

SECTION TEN

# The Twenty-Year Trajectory

## 10.1 The Scale of the Ambition

Kenya's housing deficit cannot be closed incrementally. The programme must reach and sustain 200,000 units per year of total system output — including private construction, cooperative construction, social housing, and rural improvement — by Year Five, and maintain that rate through Years Five to Twenty while the urbanisation transition is occurring at its fastest pace. The mathematics of the programme's success are not complicated. They are demanding.

| Year Range | Programme Target |
|---|---|
| Years 1–2: Foundations | Land audit complete. NHB capitalised and operational. ULB established. Three HPCs operational. Priority Settlements mapped and infrastructure begun in Kibera and Mathare Phase 1. Rent Tribunal operational in Nairobi and Mombasa. Employer levy operational. 40,000 units per year from existing market plus programme increment. |
| Years 2–5: Scale-Up | All seven HPCs operational. NHB mortgage book reaches 50,000 active loans. All five Priority Settlements in active upgrading. Rent-to-own operators fully licensed and operating in six cities. SACCO levy reaching 1.5 million members. 100,000 units per year by Year 4. |
| Years 5–10: Full Operation | System at 200,000 units per year. Kibera Phase 1 informal settlement proportion reduced from 60% to 35%. Mathare Phase 1 complete. NHB levy self-sustaining. KSBC HPCs operating at capacity and selling to private developers, cooperatives, and counties. Rural housing quality certificates issued to 400,000 households. Kenya crosses 50% urbanisation around Year 12. |
| Years 10–15: Consolidation | Nairobi informal settlement proportion reaches 40% (from 60% baseline). Secondary city upgrading programmes underway in Kisumu, Nakuru, Eldoret, and Mombasa informal areas. Rural housing quality crosses 60% of rural stock meeting Permanent Rural Home Standard. County housing plans fully embedded in county planning cycles. |
| Years 15–20: Transformation | Nairobi informal settlement proportion reaches 20% (from 60% baseline). Total cumulative social housing units: 500,000. Total cumulative NHB mortgages: 800,000. Rural housing quality: 75% of rural stock. Kenya is predominantly urban and the housing system serves that urban population at adequate scale and quality. |

## 10.2 The Urbanisation Inflection

Kenya is projected to cross fifty percent urbanisation around Year Twelve of this programme's twenty-year horizon. This inflection point is qualitatively different from the years before it. Before fifty percent urbanisation, Kenya is a predominantly rural society managing a rapidly growing urban sector. After fifty percent urbanisation, Kenya is a predominantly urban society with a large rural population. The policy instruments, the investment priorities, and the institutional capacities required on each side of that line are not identical.

The programme front-loads its urban infrastructure investment precisely because the urbanisation inflection must be met with a functioning system, not a system that is still being constructed. The HPCs, the ULB, the NHB, the tenure framework, and the settlement upgrading programmes must all be operational at scale before Year Twelve. If they are not, the inflection will produce a crisis rather than a transition.

After Year Twelve, the programme's emphasis gradually shifts: more resources to secondary city development and away from Nairobi consolidation; greater emphasis on rural housing quality as the rural population stabilises in absolute terms even as it shrinks as a proportion; more cooperative and private market delivery and proportionally less direct state intervention as the market infrastructure the programme has built begins to sustain itself.

## 10.3 The Financing of the Twenty-Year Programme

The programme's financing is structured to be self-reinforcing over time. The heavy upfront state investment — in NHB capitalisation, HPC construction, ULB establishment, and settlement upgrading — creates the institutional infrastructure that generates revenue streams, reduces per-unit costs, and enables private and cooperative capital to do the work that the state cannot do alone.

| Funding Stream | Source | Projected Annual Quantum (Year 5) |
|---|---|---|
| NHB employer levy | 1.5% employer + 1.5% employee on formal sector payroll | Ksh 35–40 billion |
| SACCO housing levy | 2% member + 1% SACCO match on SACCO membership | Ksh 12–15 billion |
| Land Value Tax | Annual assessment on urban land unimproved value | Ksh 18–25 billion |
| ULB ground rent | 0.25% per annum on all ULB-released parcels | Ksh 3–5 billion (growing) |

| Funding Stream | Source | Projected Annual Quantum (Year 5) |
|---|---|---|
| National Infrastructure Investment (housing component) | National government transfer to counties | Ksh 25 billion |
| Development Finance (World Bank/AfDB/EIB) | Concessional lending to NHB and for HPC construction | USD 500 million (Years 1–5) |
| Private investment (rent-to-own operators) | Private capital raised by licensed operators | Ksh 15–20 billion per annum |

The programme does not depend on a single funding source. Its resilience comes from diversification: if the development finance facility is delayed, the employer levy and LVT continue. If a county fails to meet its land release obligation, the national ULB programme continues in compliant counties. If private rent-to-own operators are slow to enter secondary cities, SACCO cooperatives fill the gap. The system is designed with redundancy, not dependency.

SECTION ELEVEN

# Programme-Driven Towns: Housing the New Infrastructure Economy

## 11.1 Infrastructure Creates Settlement

Every large infrastructure investment the Kenya National Development Programme makes will change the geography of human settlement. A dam does not merely store water — it creates agricultural land, generates employment, and draws a town into being around its operations. A railway station does not merely move freight — it becomes a commercial node, a labour market, and a residential catchment. An irrigation scheme does not merely grow crops — it creates seasonal labour demand that becomes permanent habitation. A mine does not merely extract minerals — it builds a company town whether the programme intends one or not.

Previous Kenyan infrastructure programmes have failed to anticipate this settlement dynamic. The result has been that the infrastructure was built, the settlement happened anyway, and the settlement was informal, under-serviced, and without tenure — because no housing programme was designed alongside the infrastructure programme. Nyumba ya Taifa does not repeat this failure. Every major

infrastructure investment in the national programme triggers a concurrent Settlement Planning Obligation: a housing, land, and services plan that is prepared before groundbreaking, not after the informal settlement has already formed around the construction camp.

| The Settlement Planning Obligation — Trigger Criteria |
|---|
| Any infrastructure project with a capital value above Ksh 5 billion triggers an automatic Settlement Planning Obligation. |
| Any infrastructure project expected to generate 500 or more permanent jobs at a single location triggers a Settlement Planning Obligation. |
| Any infrastructure project expected to open 2,000 or more hectares to irrigated agriculture triggers a Settlement Planning Obligation. |
| The Obligation is prepared by the Housing Directorate in partnership with the relevant sector ministry and the county government. It must be complete before the first construction contract is awarded. |
| The Obligation specifies: projected population growth at Years 2, 5, 10, and 20; land requirements for residential, commercial, and social use; trunk infrastructure sequencing; tenure framework; and the housing finance pathway mix appropriate to the income profile of expected residents. |

## 11.2 Water Programme Towns

The national water programme — Maji ya Taifa — involves major dam construction, irrigation scheme development, the Lake Victoria pipeline, and ASAL water point networks. Each of these generates predictable and substantial settlement pressure. The following are the primary water programme-driven towns and their housing planning obligations.

### 11.2.1 High Grand Falls Dam — Tana River County

The High Grand Falls Dam on the Tana River is one of the largest hydropower and water storage investments in the programme. The dam and its associated works will require a sustained construction workforce of 8,000 to 12,000 workers during peak construction, transitioning to a permanent operational and agricultural support workforce of 3,000 to 5,000.

| Housing Planning Element | High Grand Falls Specification |
|---|---|
| Construction phase settlement | A planned construction camp of 4,000 permanent units — not temporary container housing — built to the Kenya Building Code standard and designed for |

| Housing Planning Element | High Grand Falls Specification |
|---|---|
| | conversion to permanent residential use post-construction. This avoids the typical construction camp abandonment problem and seeds the permanent town. |
| Permanent town projection | Population of 18,000–25,000 by Year 10. The town of Kiambere/High Grand Falls becomes the administrative and commercial hub for the lower Tana Valley irrigation development. |
| Land allocation | County government of Tana River and Kitui identify and transfer 400 hectares to the Urban Land Bank for residential and commercial development. Land is adjacent to the dam access road and the transmission corridor. |
| Housing mix | 60% permanent rural home standard (ADBK rural improvement loan pathway) for smallholder farming households; 30% NHB mortgage or rent-to-own for dam operations staff; 10% social rental for low-income support workers. |
| Tenure pathway | All settlers receive Occupancy Certificates within 12 months of first occupation. Leasehold conversion eligible at Year 3. The dam operations company contributes 1% of its payroll to the NHB employer levy for its permanent workforce. |

### 11.2.2 Galana-Kulalu Irrigation Scheme Expansion — Kilifi/Tana River

The Galana-Kulalu scheme, when fully developed under the national agriculture programme, will bring approximately 400,000 hectares under irrigation in one of Kenya's most sparsely populated semi-arid zones. This scale of agricultural development requires a network of agro-service towns, not a single urban node.

| Node | Function | Housing Planning Obligation |
|---|---|---|
| Galana Hub (primary node) | Agro-processing, cold storage, ADBK branch, fuel, health centre, secondary school | ULB release of 200 ha. Planned population 35,000 by Year 15. NHB and rent-to-own pathways for permanent workforce. Rural improvement loans for smallholder settlers. |
| Kulalu Service Centre | Agricultural inputs, equipment repair, primary | ULB release of 80 ha. Population 12,000 by Year 12. |

| Node | Function | Housing Planning Obligation |
|---|---|---|
| | school, clinic | Predominantly rural home standard with ADBK finance. |
| Seasonal Labour Camps (6 nodes) | Managed seasonal harvest housing — 500 units per node, shared sanitation, clean water, secure storage | Permanent structures convertible to permanent housing when seasonal workers transition to permanent settlement. OC issued to permanent residents within 2 years of continuous occupancy. |

### 11.2.3 Northern Collector Tunnel and Mwea Expansion — Kirinyaga/Murang'a

The Northern Collector Tunnel draws water from the Mt Kenya massif to supplement the Thika reservoir system and expand Mwea irrigation. The Mwea scheme expansion from its current 30,000 hectares to over 80,000 hectares will significantly increase the permanent population of Kirinyaga County's lowland zones. Mwea already has an established settlement pattern — the obligation here is to formalise and expand it, not to plan from scratch.

The primary housing obligation for Mwea expansion is tenure formalisation: a significant proportion of Mwea's existing households hold allotment rights under the National Irrigation Authority's tenancy system, which provides occupation security but not transferable title. The programme converts NIA tenancy rights to 50-year leasehold titles for all households with 10 or more years of continuous occupation, linked to the ArdhiSasa registry, within Year Three of the programme.

### 11.2.4 ASAL Water Points Network — Northern and Eastern Kenya

The ASAL water programme installs boreholes, solar pumps, and water storage tanks at 2,000 locations across Turkana, Marsabit, Mandera, Wajir, Garissa, Isiolo, Samburu, and Kajiado counties. Each major water point — those serving populations above 3,000 — triggers a micro-settlement planning obligation: a 10-hectare ULB parcel release, a community land registration, and a rural home standard programme for the households that will stabilise around the permanent water source.

The pastoralist context requires a specific adaptation of the standard housing doctrine. Full sedentarisation is neither the programme's goal nor appropriate for communities whose livelihood is based on seasonal movement. The ASAL housing obligation targets dry-season base settlements — permanent structures at water points that households return to outside the movement season. The rural home standard applies, but the ADBK loan product is adapted with longer grace periods aligned to livestock sale cycles rather than crop harvest schedules.

## 11.3 Railway Programme Towns

The Kenya Railways and KRCC programme involves SGR extension, metre-gauge rehabilitation, and new branch lines reaching agricultural zones currently unserved by rail. Rail infrastructure creates linear settlement patterns — corridor towns that develop at station points and freight interchange nodes. These follow a predictable morphology: the station generates commercial activity; commercial activity generates service employment; service employment generates residential demand; residential demand generates a town.

### 11.3.1 SGR Naivasha Inland Container Depot — Naivasha Town

The Naivasha ICD is already operational and has already begun transforming the greater Naivasha area. The housing obligation here is urgent catch-up: the settlement pressure around the ICD has outpaced any housing planning, and a significant informal settlement is already developing in the Maai Mahiu–Naivasha corridor.

| Element | Naivasha ICD Housing Response |
|---|---|
| Immediate settlement mapping | Year One priority. All households within 5km of the ICD boundary that have been in occupation since before the ICD's commissioning are registered under the Priority Settlement Programme. OCs issued within 18 months. |
| New planned development | ULB acquires 300 ha of KRC land on the Naivasha corridor under the Railway Land Compact. Mix of rent-to-own units for ICD and logistics workers (target income band Ksh 25,000–80,000 per month) and NHB mortgage units for management-level staff. |
| Naivasha town densification | Naivasha's existing town core is zoned for increased density under the revised county spatial plan. Minimum plot ratio of 2.5 on all commercially zoned land within 1km of the ICD entrance road. LVT applied at Rate 1 to all undeveloped commercial land within this zone. |
| Population projection | Naivasha urban area grows from approximately 150,000 (current) to 320,000 by Year 10 and 550,000 by Year 20 as the ICD anchors a major logistics and light industrial cluster. This growth requires 80,000 new formal housing units in the area by Year 10. |

### 11.3.2 SGR Extension Corridor — Naivasha to Kisumu

The SGR extension from Naivasha through the Rift Valley to Kisumu will create new station towns at each major stop. The route passes through Narok, Bomet, Kericho, and Kisumu. Of these, Narok and Kericho are the most significant for new housing planning because they currently lack the urban infrastructure to absorb the growth that a major freight and passenger rail connection will generate.

| Station Town | Current Population | Housing Obligation |
|---|---|---|
| Narok | ~80,000 | ULB acquires 150 ha within 2km of planned station. Planned population 180,000 by Year 12. County spatial plan revised to guide growth toward station corridor and away from Maasai Mara buffer zone. NHB and rent-to-own the primary finance pathways for tourism and logistics workers. |
| Kericho | ~100,000 | Tea industry already provides significant employer housing — but informally. Programme formalises tenure for tea estate workers on estate land through the Occupancy Certificate pathway. ULB acquires 120 ha for non-estate worker housing. County obligation: release 5% of county urban land per annum. |
| Kisumu (SGR terminus) | ~500,000 | Kisumu already has its own housing programme under the Priority Settlement framework. SGR terminus creates a freight district requiring worker housing at Kisumu Port. KSBC bids on transit-oriented housing blocks at Kisumu Port under PPADA. Target 5,000 new units in the port district by Year 7. |

### 11.3.3 KRCC Rural Branch Lines — Agricultural Corridors

The KRCC programme restores and extends rural branch lines to serve the major agricultural producing zones: the North Rift grain corridor (Eldoret–Kitale–Kapenguria), the Mt Kenya coffee and tea corridor (Nanyuki–Nyeri–Karatina), and the Coast horticulture corridor (Voi–Taveta). Each branch line terminus and major intermediate station generates a small town or significantly expands an existing one.

The housing obligation for KRCC agricultural branch line towns is simpler than for major urban nodes. The primary need is for permanent rural housing at the permanent rural home standard, supported by ADBK rural improvement loans. In each case: a ULB parcel of 30–80 hectares is designated at or near the station; community land registration covers the surrounding smallholder land; and the Rural

Materials Cooperative establishes a materials depot within 5 kilometres of the station. The station becomes the commercial anchor for a rural service town of 5,000 to 15,000 people within ten years.

## 11.4 Agricultural Programme Towns

Shamba La Taifa — the national agriculture programme — generates settlement pressure beyond the irrigation schemes already addressed through the water programme. Agro-processing industrialisation, cooperative hub development, and the National Cereals and Produce Board's expanded storage network each create specific housing obligations.

### 11.4.1 Agro-Processing Industrial Nodes

Viwanda ya Taifa designates agro-processing industrial nodes in Thika, Eldoret, Kisumu, Mombasa, and Machakos. Each node will employ between 5,000 and 20,000 workers at full capacity. The income profile of agro-processing workers — typically Ksh 18,000 to Ksh 45,000 per month — places them squarely in the rent-to-own and lower-NHB mortgage bands. The housing planning obligation for each node is specific:

| Agro-Processing Node | Worker Housing Obligation | Timeline |
|---|---|---|
| Thika Industrial Zone (expansion) | 3,500 new units in the Thika East corridor, served by ULB ground leases. Rent-to-own primary pathway. Existing Thika informal settlements in the industrial buffer zone upgraded through the Priority Settlement framework. | Years 1–5 |
| Eldoret Agro-Industrial Park (new) | 4,000 units on 80 ha ULB parcel adjacent to the Rivatex revitalisation zone. Mixed: NHB mortgage for permanent skilled workers; rent-to-own for semi-skilled; social rental for lowest-income. KSBC bids on block construction. | Years 2–6 |
| Kisumu Port Agro-Processing Zone | 2,500 units in the Kisumu Port district (linked to SGR terminus obligation above). Combined freight, agro-processing, and port worker housing district planned as | Years 3–7 |

| Agro-Processing Node | Worker Housing Obligation | Timeline |
|---|---|---|
| | integrated neighbourhood, not dormitory blocks. | |
| Mombasa Agro-Logistics Hub (Miritini) | 6,000 units on KPA land released to ULB under the land audit. Transit-oriented density of 200+ units per hectare. Close to the Mombasa HPC for pre-cast component supply. | Years 2–7 |
| Machakos Agro-Processing Centre | 2,000 units serving the expanded horticulture and food processing sector. Primarily rent-to-own and SACCO cooperative levy pathway. County government the primary land-release partner. | Years 3–6 |

### 11.4.2 Cooperative Hub Towns

Shamba La Taifa establishes a network of National Farmers' Cooperative hubs — locations where storage, marketing, extension services, ADBK branches, and farm input supply are co-located. These hubs are not merely commercial facilities; they generate permanent employment and attract settled households seeking access to services. The programme designates 24 cooperative hub towns as Category B Settlement Planning Obligation sites: smaller than the major infrastructure town obligations but requiring the same four elements — community mapping, ULB land release, rural home standard programme, and materials cooperative depot.

## 11.5 Minerals and Industry Programme Towns

The minerals programme creates the most concentrated and potentially volatile settlement dynamic in the national programme. A mine town is not like a market town or an agricultural service centre. It has a boom-and-bust profile linked to the operational life of the mine. Housing investment in a mine town must be structured to survive the mine's closure — which means building a diversified local economy alongside the housing, not building dormitory housing that becomes worthless when the mine is exhausted.

### 11.5.1 Mrima Hill Rare Earths — Kwale County

The Mrima Hill rare earths deposit, when operational, will require a peak workforce of approximately 6,000 to 8,000 workers. Its coastal location places it within

commuting distance of Kwale town, Shimba Hills, and the Diani coastal zone. The housing strategy here deliberately resists a single-site mine town approach.

| Strategy Element | Mrima Hill Housing Approach |
|---|---|
| Distributed housing strategy | Rather than a single mine camp, workers are housed across three existing settlements — Kwale town, Msambweni, and Shimba Hills. KRCC constructs a dedicated worker bus corridor. Workers live in integrated communities, not isolated camps. Social infrastructure — schools, clinics, markets — is shared with existing residents, not duplicated in an isolated compound. |
| Tenure protection | All housing built on ULB ground leases with a specific post-operations clause: in the event that the mine's operational life ends, the ULB retains the land, the affordability covenant continues, and the Housing Directorate funds a transition housing programme to convert worker housing to affordable community residential use. No abandonment option for the mine operator. |
| Local content in construction | The Mrima Hill mining licence includes a housing local content obligation: 60% of construction contracts for worker housing must be awarded to Kwale County-registered contractors. This seeds the county's Tier 2 contractor capacity for the post-mining era. |
| Royalty-linked housing fund | 10% of the Mrima Hill rare earths royalty stream is ring-fenced to a Kwale County Housing Endowment Fund. The fund provides permanent housing capital for the county that outlasts the mine's operational life. |

### 11.5.2 Mui Basin Coal — Kitui County

The Mui Basin coal assessment under the minerals programme is subject to a careful evaluation of whether coal extraction should proceed given global climate and market trajectories. The housing planning obligation is prepared regardless of that final determination, because the infrastructure corridor that serves the Mui Basin — roads, power, water — will generate settlement in Kitui County even if coal extraction is deferred or scaled differently.

The Mui Basin housing obligation plans for a Town of Mutomo-Mui as a regional service centre for central Kitui: a planned settlement of 25,000 by Year 15, anchored by the infrastructure corridor but not dependent on a single extractive commodity. The Mutomo-Mui plan includes agro-processing (the Kitui lowland zone has significant potential for mango, sisal, and dryland horticulture), a TVET college, and

a materials cooperative depot — diversification built into the town plan from the outset.

### 11.5.3 Titanium and Coastal Minerals — Kwale/Kilifi

Base Titanium's existing Kwale operation and the broader coastal heavy minerals corridor have already transformed Kwale County's economy. The programme formalises tenure for the settled communities that have grown around the titanium processing corridor, integrates them into the ArdhiSasa registry, and applies the rural home standard improvement programme to the surrounding rural zone. The coastal minerals corridor is also a tourism corridor — the Diani coast is within 30 kilometres — and the housing planning must navigate the tension between worker housing affordability and coastal land speculation driven by tourism investment. The Land Value Tax at Rate 1 applies to all undeveloped land within the Diani-Kwale coastal strip, creating fiscal pressure against speculative holding.

### 11.5.4 Dongo Kundu Special Economic Zone — Mombasa

The Dongo Kundu SEZ, designated under Viwanda ya Taifa as the site of the Kenya Integrated Steel Corporation and a broader industrial anchor, will be one of the largest single employment nodes created by the national programme. At full development, Dongo Kundu is projected to employ 30,000 to 50,000 workers directly, with a further multiplier effect across the Mombasa metropolitan area.

| Dongo Kundu Housing Element | Specification |
|---|---|
| Worker housing district | A dedicated worker housing district is planned on the Mombasa south coast corridor, between the SEZ entrance and the Likoni crossing. ULB acquires 600 ha of Kenya Ferry Services and county land. Target: 15,000 units by Year 8. |
| Income mix requirement | The Dongo Kundu housing district must maintain an income-integrated tenure mix: no more than 40% of units in any 10-hectare block may be in the same tenure category. This prevents economic segregation within the worker district and produces a neighbourhood that is socially and commercially self-sustaining. |
| Likoni crossing improvement | The housing plan is contingent on a reliable Likoni crossing solution. The programme endorses the Mombasa Gateway Bridge proposal as the transport infrastructure that enables the south coast housing district. Without the bridge, the worker district cannot function. |

| Dongo Kundu Housing Element | Specification |
|---|---|
| KSBC HPC supply | The Mombasa HPC at Miritini supplies all pre-cast components for the Dongo Kundu worker district. Transport distance is under 15km. KSBC bids on the primary construction contracts in competition with private contractors. |
| Swahili architectural integration | The Dongo Kundu worker district design standards require integration of Swahili architectural elements — courtyard ventilation design, coral stone or coral-aggregate facade treatment, deep verandas for coastal climate — into all housing blocks. The Building Standards Institute publishes the Dongo Kundu Design Guide as a reference standard for coastal worker housing. |

## 11.6 The Cross-Programme Settlement Registry

Every settlement planning obligation triggered by the above programmes is registered in the Cross-Programme Settlement Registry maintained by the Housing Directorate. The Registry is a live database that tracks the status of each obligation through its stages: obligation prepared, land identified, community mapping complete, infrastructure under way, tenure issued, housing finance activated.

The Registry is published on the National Housing Dashboard and is updated monthly. No infrastructure contract above Ksh 5 billion may proceed to financial close without a confirmed entry in the Registry showing that its Settlement Planning Obligation is at minimum at the 'land identified' stage. This is a hard procedural gate. The procuring ministry must produce the Housing Directorate's confirmation before the Treasury signs off on financial close. This single procedural requirement — simple to implement, powerful in effect — is the mechanism that prevents the programme from repeating the pattern of infrastructure first, informal settlement second, expensive remediation third.

SECTION TWELVE

# Nyumba ya Asili — Traditional and Earth-Based Materials in the National Housing Programme

## 12.1 The Case for Material Diversity

Kenya's formal construction sector is built on a monoculture: Portland cement, steel reinforcement, burnt clay brick, and corrugated iron sheet. These materials are structurally reliable, widely understood, and well-specified in the Kenya Building Code. They are also expensive, import-dependent in their production chains, thermally poor in hot climates, and ecologically costly — Portland cement production alone accounts for approximately 8% of global $CO_2$ emissions. A national housing programme that doubles down on this monoculture at the scale of 200,000 units per year amplifies every one of those vulnerabilities.

Kenya has an alternative. Its soils, forests, agricultural residues, volcanic geology, coastal limestone, and building traditions contain a rich palette of materials that have housed its people for centuries and that, with appropriate technical development and regulatory accommodation, can house them for centuries more — at lower cost, with lower embodied carbon, and with thermal performance that is in many climates superior to cement-block construction.

This is not nostalgia. The argument for traditional and earth-based materials is not sentimental or aesthetic, though those considerations have their place. The argument is structural: a housing programme that depends on a single supply chain is fragile. A housing programme that draws on local materials — soil, bamboo, volcanic stone, agricultural fibre, coastal lime — is resilient. When a global cement price shock occurs, or a supply chain is disrupted, local materials keep building.

| The Material Diversity Doctrine |
| --- |
| Nyumba ya Taifa does not prescribe any single material system. It prescribes performance standards — structural adequacy, thermal comfort, durability, and habitability — and it allows any material system, conventional or traditional, to demonstrate compliance with those standards through the Kenya Building Code Alternative Compliance Pathway. |
| The state's role is to fund the testing and certification of traditional materials so that the cost of compliance falls on the programme, not on the individual household or the artisan trying to build with what grows in their region. |
| KSBC's Housing Production Centres are mandated to develop manufacturing processes for at least three traditional or earth-based material systems and to publish their products at transparent prices alongside conventional pre-cast components. |

## 12.2 The Material Catalogue — Kenya's Indigenous Building Palette

The following catalogue describes each major traditional or earth-based material system with its regional distribution, technical performance characteristics, current

barriers to formal construction use, and the programme's path to resolving those barriers.

### 12.2.1 Stabilised Compressed Earth Blocks (SCEB)

Stabilised Compressed Earth Blocks are compressed laterite or clay soil blocks, stabilised with 5–8% Portland cement or hydraulic lime, manufactured under mechanical pressure to achieve consistent density and compressive strength. SCEB construction is the most technically mature of all traditional material alternatives. Multiple African research institutions — including the University of Nairobi's Department of Civil Engineering and the Kenya Building Research Centre — have published compressive strength data demonstrating that SCEB blocks stabilised with 6% cement regularly achieve 3.5–5.0 MPa compressive strength, which meets or exceeds the minimum 2.5 MPa required for load-bearing masonry under the Kenya Building Code.

| SCEB Attribute | Detail |
|---|---|
| Regional applicability | Suitable wherever laterite or clay soils are available — which is most of Kenya below 2,500m elevation. Particularly suited to the Coast Region, Western Kenya, and the Mt Kenya lowland zones where laterite is abundant and cement-block transport costs are highest. |
| Thermal performance | SCEB walls have a thermal mass significantly higher than hollow cement block. In Kenya's intermediate climate zones (1,000–1,800m elevation), SCEB walls maintain interior temperatures 4–7°C cooler than cement block during peak afternoon heat without active cooling. This is a material performance advantage, not merely an aesthetic one. |
| Structural performance | Load-bearing SCEB walls up to two storeys are demonstrated at multiple Kenyan pilot sites. For three-storey or higher construction, SCEB is used as infill with a reinforced concrete frame — the same structural role as conventional block. |
| Water resistance | Unprotected SCEB dissolves in sustained rain — this is the most frequently cited objection. The resolution is plaster or render on all exterior surfaces, which is standard practice in SCEB construction globally and adds approximately 8% to material cost. A properly rendered SCEB wall has service life comparable to cement block. |
| Cost comparison | SCEB walls cost 20–35% less than equivalent cement-block walls when the soil is available within 5km of |

| SCEB Attribute | Detail |
|---|---|
| | the construction site. Transport cost is near zero for the primary material. The stabiliser (cement or lime) is the primary cost input. |
| KSBC HPC role | KSBC develops SCEB block manufacturing lines at the Nakuru, Kisumu, and Eldoret HPCs, using local soil analysis to calibrate stabiliser content for each region's laterite. SCEB blocks are added to the HPC product catalogue by Year Two. |
| Kenya Building Code pathway | The Building Research Centre publishes a SCEB Design Guide by Year One. The Code is amended under the Alternative Compliance Pathway to include SCEB as a named compliant material for load-bearing walls up to two storeys. Three-storey SCEB designs require an engineer's certificate. |

### 12.2.2 Rammed Earth and Pisé

Rammed earth construction compacts moist soil, gravel, and stabiliser into formwork at high pressure to form monolithic walls of exceptional density and thermal mass. Pisé is the traditional French term for the same technique. Rammed earth is not a new technology in Kenya — it is the original technology. The highland vernacular of the Kikuyu, Kamba, Meru, and Luhya all include rammed-earth or mud-wall construction traditions that predate any colonial building influence by centuries.

The modernised rammed earth system differs from traditional practice in two critical ways: first, the stabiliser content (5–8% cement or lime) dramatically extends the wall's resistance to moisture and gives it a consistent, codeable compressive strength; second, the use of mechanical tamping equipment — either pneumatic or hydraulically powered — makes production far faster than hand tamping alone. A two-person team with a pneumatic rammer can complete a 10-metre wall section in a single day.

Rammed earth is most appropriate for single-storey rural and peri-urban construction, particularly in the highland and midland zones where the soil profile is suitable. It is less suited to coastal clay soils. The programme funds three demonstration rammed earth housing clusters — one in Murang'a County, one in Kisii County, and one in Bungoma County — to document performance under local conditions, train local artisans, and generate BSI-accepted performance data for code inclusion.

### 12.2.3 Bamboo

Kenya has significant natural bamboo stands in the Aberdares, Mount Kenya, and Mau Forest ecosystems. These stands are currently under-exploited commercially and are in some areas actively managed only for watershed protection. Bamboo as a structural material is established at industrial scale in Colombia, India, and China — countries with similar climate profiles to highland Kenya. The International Network for Bamboo and Rattan has published structural design tables for over 30 bamboo species; Oxytenanthera abyssinica, the primary species of Kenya's highland stands, has published engineering data from Ethiopian and Ugandan research programmes.

| Bamboo Application | Technical Notes and Programme Role |
|---|---|
| Structural walls | Borate-treated bamboo culms in a panelled frame system. Borate treatment provides resistance to termites, fungi, and moisture — the three primary objections to untreated bamboo. BSI includes borate treatment certification as a mandatory pre-use requirement. Wall panels are infilled with earth plaster or sisal-cement board (see below). |
| Roof structure | Bamboo roof trusses replace timber trusses at 40–60% lower cost in regions where bamboo is locally available. Engineered bamboo trusses are pre-designed in a KSBC standard truss catalogue, available as a free download, specifiable by any Tier 3 Registered Fundi. |
| Flooring | Bamboo strip flooring, pressure-treated and lacquered, provides a durable, washable floor surface superior to concrete screed in terms of thermal comfort and acoustic performance. Currently produced in small quantities by artisans in Murang'a and Nyeri; the programme establishes a bamboo flooring cooperative processing facility in each county with significant bamboo resources. |
| Scaffolding | An immediate, code-simple application. Bamboo scaffolding is used in Asia at skyscraper scale. For low-rise residential construction in Kenya, bamboo scaffolding is technically straightforward and eliminates the cost of steel scaffolding hire — a significant saving for Tier 3 contractors working on rural sites. |
| Sustainable harvesting mandate | All bamboo used under this programme must come from registered harvesting cooperatives operating under Kenya Forest Service sustainable harvesting permits. Bamboo re-sprouts from its root system — sustainable harvest does not destroy the stand. The programme targets 20,000 hectares of community-managed bamboo plantation by Year Ten, providing a permanent domestic |

| Bamboo Application | Technical Notes and Programme Role |
|---|---|
| | supply. |

### 12.2.4 Sisal Fibre Composites

Kenya is one of the world's major sisal producers. Sisal fibre — the strong, durable plant fibre extracted from Agave sisalana leaves — has well-documented properties as a reinforcement material in cement-based composites. Sisal-cement boards (also called sisal-reinforced fibre cement) are manufactured by mixing sisal fibre with Portland cement slurry and pressing it into sheet form. The resulting board is lightweight, weather-resistant, impact-resistant, and entirely free of the asbestos that previously dominated the fibre-cement market.

Sisal-cement board has a natural place in the Kenya national housing programme because it connects the agricultural sector to the construction sector through a domestic supply chain that is entirely within Kenya's own economy. The sisal is grown in Baringo, Kilifi, Taita-Taveta, and Kwale. The cement comes from Bamburi or East African Portland. The manufacturing process is within the technical reach of medium-scale Kenyan industry. The board replaces imported fibre cement, imported gypsum board, and imported plywood in roofing underlays, wall cladding, and partition panels.

The programme commissions KSBC to establish a Sisal Composite Research and Manufacturing Unit at the Mombasa HPC in Year Two, in partnership with the Sisal Board of Kenya. Target: a sisal-cement board product available in the HPC catalogue by Year Three, at a price competitive with imported alternatives.

### 12.2.5 Volcanic Stone

The Rift Valley and Mount Kenya highland zones are underlain by extensive volcanic geology. Trachyte, phonolite, basalt, and ignimbrite — the common volcanic rocks of central Kenya — are dense, durable, and workable with basic masonry tools. Dry-stone and mortar-jointed volcanic stone construction has a long tradition in the Kikuyu, Meru, and Rift Valley communities. Dressed volcanic stone walls have demonstrated service lives of over a century in the highland climate.

Volcanic stone construction requires higher labour inputs than block work but zero material import cost and zero manufacturing energy. A Tier 3 Registered Fundi with volcanic stone skills can source all primary materials from within a few kilometres of the site. The KNQF Level 4 Building Skills Certificate includes a volcanic stone masonry elective specifically for highland counties, taught by master masons recruited from communities with active stone construction traditions.

The primary constraint on volcanic stone construction at scale is not material availability — it is the absence of standardised quarrying and dressing capacity. The programme funds county-level stone quarrying cooperative development in Nakuru,

Nyeri, Meru, and Laikipia counties, with KSBC providing technical quarrying and dressing guidance. Dressed volcanic stone blocks enter the HPC catalogue as a regionally available alternative product.

### 12.2.6 Coastal Lime and Coral Stone

The Swahili coastal building tradition is one of the most sophisticated traditional building cultures in East Africa. For over a thousand years, the coastal towns of Mombasa, Lamu, Malindi, Kilwa, and Zanzibar were built in coral stone — shaped blocks of porite coral — bonded with coral lime mortar and plastered with coral lime render. These buildings were thermally excellent, humidity-resistant, and of extraordinary longevity. Many structures in Lamu Old Town that date from the 17th and 18th centuries remain structurally sound.

Live coral harvesting is rightly prohibited under Kenya's marine conservation law. The programme does not propose any deviation from this. But fossilised coral — Pleistocene-era porite limestone found in inland deposits across the Coast Region — is ecologically inert and structurally equivalent to the historic building material. Fossilised coral limestone quarries in Kilifi and Kwale counties currently supply ornamental stone; the programme develops them as a structural building material with SCEB-equivalent code certification.

Coral lime — produced by burning coral or coastal limestone — is a traditional binding and plaster material superior to Portland cement for certain applications: it is softer, allows moisture movement without cracking, and is far lower in embodied carbon. The programme includes a coral lime production cooperative development in Kilifi County, targeting production of 5,000 tonnes per annum by Year Four for use in coastal housing renovation and new construction under the Alternative Compliance Pathway.

### 12.2.7 Makuti Thatch — Regulated Traditional Roofing

Makuti — woven coconut palm leaf thatch — is the traditional roofing of the Kenya coast and is thermally the best-performing roofing material in the coastal climate: naturally insulating, allowing air flow, providing deep shade, and requiring no manufacturing energy. A well-laid makuti roof on a correctly designed structure keeps the interior 8–12°C cooler than a corrugated iron sheet roof in the same conditions.

Makuti's barrier to formal housing use is fire rating. Untreated palm thatch fails fire resistance testing required under the Kenya Building Code for permanent structures. The programme commissions the Building Research Centre to evaluate fire-retardant treatment options for makuti — borate impregnation and ammonium phosphate treatments have demonstrated success in similar palm thatch applications in South-East Asia — and to develop a treated makuti specification that meets the Code's Class B fire performance requirement for residential structures.

If BRC testing confirms code compliance of treated makuti by Year Two, the material is included in the Alternative Compliance Pathway for single-storey residential structures in the Coast Region and other counties where coconut palm is abundant. The programme does not mandate makuti. It removes the regulatory barrier that currently prevents households who wish to use it from doing so legally.

## 12.3 The Kenya Building Code — Alternative Compliance Pathway

The existing Kenya Building Code does not accommodate most of the materials described above. It specifies concrete block, burnt brick, timber, and steel as the default compliant materials for permanent construction. Incorporating traditional and earth-based materials does not require rewriting the entire Code. It requires activating and populating the Alternative Compliance Pathway — a mechanism that already exists in principle in Kenyan construction law but has never been systematically used.

| ACP Stage | Process |
|---|---|
| Stage 1: Technical dossier | Any material proponent — a KSBC research unit, a university, an industry association, or an individual inventor — submits a technical dossier to the Building Research Centre demonstrating performance data for the material across the relevant Code parameters: compressive strength, flexural strength, moisture resistance, thermal performance, durability, and fire rating. |
| Stage 2: BRC evaluation | BRC evaluates the dossier within 90 days. It may request additional testing. It publishes its evaluation report publicly. If the material meets the relevant Code parameters, BRC issues an Alternative Compliance Certificate. |
| Stage 3: Code appendix inclusion | Certified materials are added to the Kenya Building Code Alternative Materials Appendix within 6 months of certification. The Appendix is a live document, updated twice yearly. It specifies the design parameters and construction specifications for each certified material. |
| Stage 4: Specifiability | An Alternative Materials Appendix-listed material can be specified on a building permit application by any registered architect, engineer, or Tier 3 Fundi using the published design parameters. BSI inspects alternative material construction against the Appendix specifications. |

| ACP Stage | Process |
|---|---|
| Programme commitment | The Housing Directorate commits to funding BRC evaluation costs for all traditional and earth-based materials identified in this section. No material proponent pays for BRC evaluation of indigenous building materials during the first seven years of the programme. The state absorbs this cost as an investment in material diversity. |

## 12.4 Traditional Materials in the KSBC Housing Production Centres

KSBC's Housing Production Centres are primarily associated with conventional pre-cast concrete manufacturing. The programme extends their mandate explicitly to include traditional and earth-based material production. By Year Three, each HPC must have at least one production line dedicated to an alternative material system appropriate to its regional context:

| HPC Location | Primary Alternative Material Line | Secondary Line (Year 5) |
|---|---|---|
| Nairobi (Athi River) | SCEB blocks — using Athi River basin laterite soil | Sisal-cement board (sisal sourced from Baringo cooperative) |
| Mombasa (Miritini) | Sisal-cement board (primary coastal product) | Coral lime render and block (fossilised coral aggregate) |
| Kisumu | SCEB blocks — using Lake Victoria basin laterite | Bamboo roof trusses (Mt Elgon and Mau bamboo) |
| Nakuru | Volcanic stone dressed blocks (Rift Valley trachyte) | Rammed earth panel systems for highland lowrise |
| Eldoret | SCEB blocks — using North Rift laterite | Bamboo structural panels (Cherangany bamboo) |
| Meru | Volcanic stone (Mt Kenya phonolite) | SCEB with Meru highland laterite stabilisation |
| Garissa | Adobe/mud brick with gypsum stabiliser for ASAL context | Lightweight SCEB for extreme heat climate |

All HPC alternative material products are tested and certified under the Alternative Compliance Pathway before going on sale. BSI maintains a material sample registry — a physical repository of certified HPC products at each BSI regional office — so

that inspectors can compare field materials against certified standards without laboratory re-testing.

## 12.5 The Traditional Building Skills Programme

Material innovation without skill transmission fails. Kenya already has master practitioners of every traditional building system described in this section. Swahili masons who know coral stone and lime; highland stone wallers who know volcanic rock; lowland artisans who know SCEB and rammed earth; coastal carpenters who know makuti and timber frame. These people exist. Many are elderly. Their knowledge is not well-documented, not formally certified, and not transmitted to the next generation at any scale.

The programme includes a Traditional Building Skills Capture and Transmission Programme, operating through the TVET system and the KNQF Level 4 Building Skills Certificate:

| Programme Component | Description |
|---|---|
| Master practitioner registration | A National Register of Traditional Building Master Practitioners is established by Year One. Any practitioner with 15 or more years of experience in a traditional building system may apply for registration. Registration confers an honorary KNQF Level 6 designation and the right to teach as an assessor on TVET practical programmes. |
| Curriculum integration | KNQF Level 4 Building Skills Certificate includes regional traditional material electives: coastal stone and lime for Coast Region TTVETs; volcanic stone masonry for highland TTVETs; SCEB and rammed earth for lowland and ASAL TTVETs; bamboo construction for forest-adjacent TTVETs. |
| Apprenticeship stipend | Trainees in traditional building electives receive a 6-month apprenticeship stipend of Ksh 8,000 per month, funded by the Housing Directorate, for the practical component of their certificate. The apprenticeship is served under a registered Master Practitioner at a real building site. |
| Documentation fund | Ksh 500 million over five years for the Building Research Centre to document, photograph, and publish technical manuals on each traditional building system. Manuals are free to download, published in Swahili and English, and distributed in hard copy to all county TVET colleges. |
| Community | One traditional material demonstration build per |

| Programme Component | Description |
|---|---|
| demonstration builds | county per year for the first five years. Each build is a real residential structure for a real household, built using traditional materials and certified under the Alternative Compliance Pathway. The build is a public training event: any registered fundi, TVET student, or interested resident may attend and participate. |

## 12.6 Climate Appropriateness — Matching Material to Microclimate

Kenya's climatic diversity — from the arid north and east, through the humid lowlands, to the cool highland plateau, to the hot and humid coast — means that no single material system is optimal everywhere. The programme's material guidance is regionally specific. The following matrix is a planning reference, not a mandate. Any combination of certified materials that meets the Kenya Building Code performance standards is permissible.

| Climate Zone | Recommended Traditional Materials | Primary Benefit |
|---|---|---|
| Highland cool (above 1,800m): Aberdares, Mt Kenya, Mau, Cherangany | Volcanic stone (primary walls); SCEB (secondary); treated timber frame; bamboo roof structure | Thermal mass retains daytime heat into cool nights. Stone walls dramatically reduce heating requirement. Bamboo and timber structurally optimised for highland rainfall loads. |
| Midland intermediate (1,000–1,800m): Central, Western, Nyanza, Rift Valley lowlands | SCEB (primary walls); rammed earth; bamboo frame infilled with earth plaster; sisal-cement board roofing underlay | Thermal mass moderates the diurnal temperature swing typical of midland climates. SCEB's locally sourced laterite eliminates transport cost. Bamboo provides structural flexibility for sloped terrain. |
| Coastal humid (below 100m, high humidity): Mombasa, Kilifi, Kwale, Lamu | Fossilised coral stone; coral lime plaster; treated bamboo frame; makuti roofing (where certified); sisal-cement board cladding | Coral stone and lime allow moisture vapour movement without structural deterioration — critical in high-humidity climates where cement-block walls trap moisture and promote |

| Climate Zone | Recommended Traditional Materials | Primary Benefit |
|---|---|---|
| | | mould. Makuti provides superior ventilation. Bamboo frame allows natural ventilation design. |
| ASAL arid and semi-arid (below 800mm annual rainfall): Turkana, Marsabit, Garissa, Mandera, Wajir, Isiolo, Samburu, Kajiado lowlands | Adobe/mud brick with gypsum stabiliser; SCEB with high clay content; heavy rammed earth walls; flat roof with internal drainage | In arid climates, wall thickness is the primary thermal strategy. Very thick earth walls (500mm+) maintain interior temperatures well below exterior peak. Flat roofs with internal drainage are appropriate where annual rainfall is below 400mm. |
| Lake basin (Victoria shoreline, Turkana lakeside) | SCEB with lake clay (tested and certified); treated bamboo; sisal-cement board | Lake clay soils require careful stabiliser calibration — higher cement content than standard laterite. BRC provides regional soil testing guidance. Bamboo performs well in the humid lake-edge microclimate with borate treatment. |

The climate appropriateness matrix is published as a free public reference document by the Building Research Centre and updated as new performance data from the Alternative Compliance Pathway becomes available. County governments are encouraged to incorporate the matrix into their County Spatial Plans and to specify traditional material use in County Design Guides for residential development.

## NYUMBA YA TAIFA — The National Housing Vision. *Kenya National Development Programme.*

This document forms part of the Kenya National Development Programme and should be read alongside Viwanda ya Taifa (Industry and Manufacturing), Maji ya Taifa (Water), Usafiri wa Taifa (Railway and Transport), Madini ya Taifa (Minerals and Mining), Utalii wa Taifa (Tourism), Shule ya Taifa (Primary Education), Elimu ya Kina (Secondary Education), Chuo Kuu ya Taifa (Tertiary and University Education), and Afya ya Taifa (National Health Vision). The full programme constitutes an

integrated national development architecture, not a collection of independent sectoral documents.

# PROGRAMME INTEGRATION APPENDIX

*Nyumba ya Taifa — Housing Vision — Cross-Programme Integration, Employment Summary and Legal Register*

## A. Employment Summary

| Institution / Role | Permanent | Entry-Level | Entry Qualification and Pathway |
|---|---|---|---|
| National Housing Bank (NHB) staff | 2,000 | 500 | Mortgage officers, risk analysts, customer service — KNQF Level 5–6. |
| Urban Land Bank (ULB) staff | 500 | 150 | Land officers, lease administrators — KNQF Level 5–6. |
| Rent Tribunal staff | 470 | 100 | Registrars, mediators (47 county tribunals) — KNQF Level 5. |
| Settlement Maintenance Corps — urban ward teams (from Makazi) | 50,000 | 35,000 | Street maintenance, utilities, green space — KNQF Level 2–4. Deployed across all urban wards. |

| Employment Summary | Figure |
|---|---|
| Total permanent positions (Year 10 steady state) | ~52,970 |
| Entry-level positions (KNQF Level 2–5) | ~35,750 |
| Reference — full programme employment register | Programme Integration Index (PII) Section Two |

## B. Cross-Programme Linkages

Every linkage below names the specific institution, data system, or instrument that creates the interface. Vague references are not listed — only confirmed operational connections.

| Links To | Specific Linkage — Institution, Data System, or Instrument at the Interface |
|---|---|
| Ardhi ya Taifa | ULB is the institutional expression of Land Value Tax — LVT frees speculative urban land for ULB acquisition at below-market prices. ORC (Occupation Recognition Certificate) is the tenure document for all informal settlement residents — the gateway to social housing rent-to-own. The Rent Tribunal resolves disputes |

| | |
|---|---|
| | under the Land Registration Act. |
| Uzalishaji wa Nyumba | Uzalishaji is Nyumba's operational delivery companion. Every housing delivery stream (rent-to-own, affordable market, cooperative, rural improvement) is operationally designed in Uzalishaji. NHB mortgage products are in Nyumba (capital structure) and Uzalishaji (individual product specifications, eligibility criteria, equity accumulation rates). |
| Jamii na Ustawi | Social protection recipients are priority applicants for Stream 1 (rent-to-own) social housing. OVC households and female-headed households receive priority weighting in the rent-to-own eligibility scoring. 3% of social rental stock reserved for released prisoners (designed in Ulinzi, operationalised in Nyumba/Uzalishaji). |
| Ulinzi na Usalama | National Fire Service fire safety brief for all housing blocks above 4 storeys: KSBC housing block design standard must incorporate National Fire Service specifications for evacuation, sprinkler systems, and fire compartmentation. This requires an explicit interface between Ujenzi (KSBC Design Studio) and Ulinzi (Fire Service standard) before HPC component designs are finalised. |
| Mfumo wa Katiba | National Housing Bank Act — Tier 1 Year 1 legislation. Urban Land Bank Act — Tier 1 Year 1. Employer Housing Levy (1% of payroll) statutory basis in NHB Act. Land Value Tax Act (Year 3) frees speculative land for ULB programme. |

## C. Legal Instruments and Constitutional Protection

| Legal Instrument | Year | Pathway |
|---|---|---|
| National Housing Bank Act — capitalisation, Employer Housing Levy, mortgage products | Year 1 | Simple majority |
| Urban Land Bank Act — 99-year ground leases, 0.25% ground rent, affordability covenants | Year 1 | Simple majority |
| Rent Tribunal Act — county-level rent dispute resolution | Year 1 | Simple majority |
| Settlement Maintenance Corps Act — permanent urban ward maintenance employment | Year 1 | Simple majority |

## D. Live Metrics and Accountability

**Full cross-reference detail:** Programme Integration Index (PII) — Sections 1, 2, and 3.
**Live metrics:** National Housing Dashboard (shared with Uzalishaji). Daily: OC issuance rate, Occupation Recognition Certificate registrations. Monthly: NHB mortgage book value

and default rate, ULB ground lease issuance, rent-to-own equity account accumulation rates. Annual: housing deficit estimate (programme delivery vs new household formation).